MARSH

BIOGRAPHY

JESSE R. SLOANE, P.E.

Vice President

CURRENT RESPONSIBILITIES

Jesse Sloane is a vice president for Marsh Advisory's Construction Consulting Solutions Practice, specializing in dispute resolution, forensic schedule analysis, management consulting, and risk management. He supports clients at any point in the construction lifecycle with services including dispute and claims analyses, change order assessments, project controls advisory, risk management, project performance and financial audits, contract administration, scheduling, and claims management.

EXPERIENCE

Jesse has over thirteen years of experience in planning, scheduling, construction, project management, and leadership. He provides services to both international and domestic clients, assessing engineering, construction, management, and commercial issues on complex projects including vehicular and rail transportation systems; power plants; defense facilities; residential housing complexes; storm water management distribution systems; fertilizer plants; ship construction and refurbishment; municipal facilities; hospitality facilities; and commercial buildings such as shopping malls, schools, office buildings, and warehouses.

Jesse performs analyses on construction management performance, schedule delay and disruption, inefficiency, risk engineering, as well as evaluating damages through the extensive review of project documents, schedules, and costs. He has presented expert findings at mediations and settlement negotiations, has authored several expert reports in support of litigation, and has assisted with depositions, mediations, arbitrations, and trials.

Before joining the consulting world, Jesse served as a Nuclear Trained Officer with the United States Navy for seven years, trained in the nuclear fuel cycle and the design, construction, operation, and refueling of nuclear power plants, including boilers and pressure vessels, in accordance with industry standards and regulatory requirements. His service for the Navy and also for the Department of Energy included significant planning and scheduling related to aircraft carrier and submarine refueling projects, spent nuclear fuel containment, shipment, and disposal, and refueling process safety responsibilities.

EDUCATION

- BM in music performance, The Peabody Institute of the Johns Hopkins University
- BS in mechanical engineering, Drexel University, *Summa Cum Laude, First Honors*
- MEng in nuclear engineering, Pennsylvania State University

AFFILIATIONS

- Licensed Professional Engineer: Virginia and Pennsylvania
- Pennsylvania Department of Environmental Protection, Low-Level Waste Advisory Committee, Member
- American Nuclear Society (ANS), Member
- Delaware Valley Section of the Association for the Advancement of Cost Engineering (AACE) International, Member
- National Society of Professional Engineers (NSPE), Member
- Pennsylvania Society of Professional Engineers (PSPE), Member

PAPERS AND PRESENTATIONS

- *Rickover Principles: Applying the Success of the Nuclear Navy to Construction Projects and Claims Analysis*

AACE Northeast Symposium; Philadelphia, Pennsylvania, March 2019

- *ABA Forum on Construction Law Trial Academy*

American Bar Association; Dallas, Texas; February 2018

REPRESENTATIVE EXPERIENCES

- Evaluated owner's claims for delay in the construction of a cogeneration thermal power plant in South America. Key components of the power plant were lost when the cargo ship transporting materials and equipment from Europe sank. Performed a forensic schedule delay analysis to quantify the impact of the in-transit loss of critical components for the project. Documented findings in a fully exhibited report to assist with the calculation of a $21M claim associated with the loss of the critical components. Presented findings to insurer and assisted owner in the negotiation and settlement of the delay claim.
- Evaluated the drainage design of an $800M Canadian electronic toll highway expansion project. Developed a model to validate and correlate financial value of design changes against an alleged $12M increase in material and labor costs due to errors and omissions in the design of the drainage system. Created a methodology to investigate and recreate the drainage design from the bottom up to validate and quantify the impact of each error and omission.
- Implemented a risk engineering program to manage subcontractor performance during the construction of a $1B+ technology campus in California. Led a team of project managers from the construction management firm in the evaluation of multiple subcontractors to mitigate the risk of subcontractor default. Worked onsite with project management team during routine site visits to ensure the successful understanding and implementation of the risk engineering program.
- Evaluated contractor's $14M claims for delay and loss of productivity associated with the reconstruction of 1.5 miles of roadway through a National Park. Reconstruction efforts included demolition of existing roadway and installation of new retaining walls, cantilevered viaducts, guard walls, drainage systems, grading, and asphalt surfacing. Reviewed and assessed contract modifications, contemporaneous schedules and other project records to determine validity of claimed delays. Developed a fully exhibited

expert report and prepared and presented schedule analysis graphics and summary findings to client. Subsequently, attended meetings with all parties, including opposing counsel and plaintiff's schedule delay and damages expert, to discuss delay and loss of productivity analyses in attempts to settle the disputes in advance of negotiation/settlement discussions. Presented expert findings at mediation and assisted counsel in reaching a satisfactory resolution.

- Retained by counsel to evaluate schedule delay and impacts in connection with design and construction management services associated with the installation of a wireless communication access system in New York City's Grand Central Terminal and Park Avenue tunnel system. The $78M project was constructed on behalf of a partnership of four wireless carriers with oversight from the local transportation authority and the New York State Historic Preservation Office. The project scope included the radio frequency design, the detailed architectural and engineering design, and construction of a wireless cellular network, a wireless data network, i.e., Wi-Fi, a congruent communications network for emergency communications for first responders, and a head end room to act as the master facility for receiving, processing, and distributing service throughout the facility. The contractor's $22.5M claim included increased design and subcontractor costs, additional project management costs, and delay damages, all allegedly due to deficiencies in the detailed design. Performed a schedule delay analysis to accurately quantify project delays and identify the root causes, assessed and responded to the contractor's claims, and documented all findings in a fully exhibited expert report.
- Retained by counsel to evaluate contractor's claims and performance on the construction of $1.4B new direct reduction hot briquetted iron plant. The project includes a 450-foot high reduction furnace tower, reformer, heat recovery system, water treatment plant, iron ore handling facility, and loading station and dock. Claims totaled over $40M for extra work, delays, acceleration, and labor inefficiency. Evaluated schedule delays associated with process tower erection, piping installation, heavy-lift cranes, and furnace construction. Analyzed change requests for delays, inefficiency and additional work. Prepared schedule graphics to present findings and issue studies to assist in reaching a mutually beneficial settlement prior to arbitration.
- Retained by counsel to evaluate causes of and damages related to pipe system failure in a distribution tunnel system project. The project included engineering services for the construction of the distribution system which was designed to reduce combined sanitary and storm sewer overflows. Prior to completion of construction the system failed resulting in leaks. Assisted client in determining those factors that led to the failure. Developed timeline of significant events which led up to and were responsible for the pipe system failure. Performed a full evaluation of damages to determine proper liability for repair of the damages. Developed fully exhibited reports of findings for client. Assisted with depositions of fact witnesses and opposing experts. Assisted counsel at trial.
- Evaluated delays and cost overruns on behalf of a mechanical subcontractor associated with the construction of a greenfield nitrogen fertilizer plant in Iowa. The $1.8 billion dollar plant will produce between 1.5 and 2 million tons of nitrogen fertilizer a year. The subcontractor entered into a contract to perform work on the Upstream Ammonia plant, but agreed to perform work on the Downstream Urea plant on a time and materials (T&M) basis. Issues evaluated include delays associated with equipment delivery, refractory installation, material requisitions, changes in budgeted and forecasted manpower, contract performance metrics, and changes to project scope. Prepared schedule analysis graphics and multiple exhibited expert reports in support of several mediations, international arbitration, and a jury trial. Assisted with depositions of fact witnesses and opposing experts. The mechanical subcontractor received a favorable award at an International Chamber of Commerce arbitration for its

claims regarding its contract work on the Upstream plant. For its T&M work on the Downstream Urea plant, a jury awarded the mechanical subcontractor $62.4M.

- Retained by U.S. General Services Administration to analyze a delay claim REA presented by the general contractor for the $50M new construction of the Tornillo-Guadalupe Land Port of Entry in Tornillo, Texas, along the US-Mexico border. The facility included 12 buildings, roadways, sitework, and access control for the 100+ acre site. The contractor's $16.5M REA included delay, inefficiency, and direct work claims which alleged significant delays due primarily to government-induced scope changes and delays. Analyzed the contractor's TIA delay analysis compared to contemporaneous project schedules, progress records, and photographic evidence to demonstrate contractor-induced delay throughout the course of the project. Developed an exhibited expert report of findings for the client. Attended settlement conference meetings with GSA and the contractor to present preliminary findings regarding delay analysis and assist in negotiation/settlement discussions.
- Evaluated owner's claim for the restoration and renovation of a high-end Caribbean hotel. The hotel suffered extensive damage during Hurricane Maria, resulting in $220M in remediation and repair costs. Performed a forensic schedule delay analysis to quantify the period of indemnity following the loss. Presented delay findings to insurers and assisted with settlement negotiations. The delay findings significantly helped to recover an additional $77M in a mutually beneficial settlement agreement.
- Evaluated steel erection subcontractor's $2M claim regarding a loss that occurred during the expansion of a convention center. Quantified labor and equipment costs necessary to perform corrective work and recover schedule so as not to delay project completion. Coordinated final negotiations with the insurer's adjustor for a final settlement inclusive of all incurred costs related to the loss.
- Evaluated an $8.4M claim related to property damage and delay in start up for a Caribbean hotel. The construction site was damaged during Hurricane Maria, and the subsequent recovery and resumption of work resulted in increased costs to repair the damage, as well as lost revenues due to late completion. Performed a forensic schedule analysis to quantify the delay in start up and validated the property damage costs in an effort to reach a global settlement between the owner and the insurer.
- Retained by counsel to evaluate a claim for damages incurred in connection with the replacement of a flooring system at a newly constructed Texas hospital facility. Shortly after the completion of installation of the original flooring system, the flooring began to show distress through various modes of failure and cracking, requiring the complete removal and replacement of the flooring. The replacement effort resulted in a disruption of patient services. Evaluated owner's claim for property damage and business interruption, and quantified a revised claim based on project records and financial reports. Authored two fully exhibited expert reports in support of litigation.
- Evaluated delays to the construction of a ~400 unit residential housing project in California. The project suffered two separate losses from electrical and water damage, resulting in remediation work, increased costs, and delays to placing the residential units up for sale. Performed a forensic schedule delay analysis to quantify the delays associated with each loss event. Authored a fully exhibited report of findings to assist with the submission and resolution of the claim to the insurer.
- Evaluated delays to the construction of approximately 600 single-family homes due to a series of storm weather events in California. The weather events resulted in significant site cleanup and construction delays, for a total claim in excess of $42M. Performed a forensic schedule analysis to quantify the construction delays and presented findings to all key stakeholders. Assisting with claim negotiations and mediation.

- Lead engineer for Nuclear Shipping Containers with the U.S. Navy in the Reactor Refueling Division as both a Naval Officer and civilian engineer for the Department of Energy. Scheduled and managed the shipment and unloading of naval nuclear spent fuel shipping containers in support of U.S. Navy fleet refueling schedules and legal commitments to the State of Idaho. Oversaw the design, transportation, and installation of new naval nuclear fuel and pressure vessels in accordance with American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (BPVC) and in support of submarine and aircraft carrier construction and refueling. Provided technical oversight for analysis and testing a new spent fuel shipping container railcar and directed the $6M design of a new security escort railcar for shipments of high-level radioactive material in compliance of Association of American Railroads standards. Led focused and coordinated reviews of safety analysis reports for packaging (SARPs) to support shipment of spent nuclear fuel while ensuring packages meet Code of Federal Regulations (CFR) requirements. Maintained communication with the Nuclear Regulatory Commission (NRC) to coordinate the review of Naval Nuclear Propulsion Program SARPs and certificates of compliance (CoCs) for the shipment of high-level radioactive material.
- Provided technical oversight for analysis and testing of a new spent nuclear fuel shipping container railcar for shipments of high-level radioactive material in compliance of Association of American Railroads standards. The railcar is a six-truck flatbed railcar with a cradle support system welded to the railcar deck and a safety monitoring system attached to all axels. The railcar and associated shipping container transport aircraft carrier spent fuel from U.S. naval shipyards to an interim storage facility and will also accommodate future shipments for disposal of all U.S. Navy spent nuclear fuel to a geologic repository. Directed the $6M design of a new security escort railcar to be used for shipments of new and spent nuclear fuel.
- Lead engineer for the Spent Fuel Disposal Project with the U.S. Navy in the Reactor Refueling Division as a Naval Officer. Initiated a $14.1M facility expansion to support spent fuel dry storage needs through 2032. Revised nuclear safety reports and procured $25M of dry storage equipment. Managed dry storage operations of naval spent nuclear fuel as the Coordinator of Division Activities for dry storage facilities. Procured $4M in equipment and developed a nuclear safety strategy with functional requirements for a new campaign to package 1400 pieces of spent nuclear fuel remnants over 10 years at a total cost of $135M and 550 man-years of work. Provided urgent technical support for ongoing wet fuel handling and packaging operations of high curie-content spent nuclear fuel. Developed risk mitigation plans to procure $21.8M of spent fuel dry storage equipment from a new vendor to support the packaging schedule with low margin to need while promoting competition and ensuring compliance with federal acquisition requirements. Revised spent nuclear fuel certification requirements which provide traceability to Naval Nuclear Propulsion Program records for compliance with repository standards for final disposal of spent nuclear fuel.
- Evaluated schedule delays for $25M project involving the construction of a U.S. Army Reserve training facility, maintenance building, and multiple storage buildings. Evaluated schedule delays and performed root cause analysis investigating all parties associated with the delay of permanent power availability including the owner, contractor, subcontractors, and utility.
- Evaluated delays associated with construction of a new radar facility for tracking space debris. The project also included construction of an independent power plant to provide electricity to the facility. Analyzed project schedules to quantify critical delays to contractor progress due to differing site conditions and delays from other contractors. Assisted counsel with the development of subcontractor claim for delays associated with differing site conditions.

- Retained by the U.S. Department of State to analyze a delay claim presented by the general contractor for the $94M construction of a new housing compound in Port-au-Prince, Haiti. The project involved the design and construction of housing units, recreational facilities, and various warehouse and support facilities. The contractor's $20M claim included delays associated with Government-directed design changes. Analyzed the contractor's TIA delay analysis compared to contemporaneous project schedules, correspondence, progress records, and photographic evidence to accurately quantify the amount of excusable delay for which the contractor was entitled. Developed a fully exhibited expert report.
- Provided a schedule delay analysis on behalf of the valve supplier on reconstruction of a reservoir dam. Dam was raised over 100 feet which more than doubled the capacity of the existing reservoir. Analyzed progress of construction and delays in delivery and installation of multiple large body valves. Prepared detailed timelines of key issues and developed detailed schedule analysis.
- Evaluated claim for delays and cost overruns in connection with the refurbishment of a mainline ferry. This ocean-going vessel has 26 cabins, a full service dining room, and a car elevator. Refurbishment consisted of planned work plus emergent work based on inspections. Shipbuilder alleged defective design, excessive changes, and improper direction and oversight. Analyzed changes, problems with workmanship and quality control of welding processes, and necessary remediation of defective work. Reviewed claimed cumulative impact damages.
- Evaluated delays associated with the multi-phased interior and exterior renovation of a 100,000 square foot shopping mall. The project included selective demolition of interior store features, construction of new food court façades, main entrance, administration addition, and complete renovation of the food court, retail concessions, mall corridors, shops, restrooms, and site work. Quantified delay by performing a CPM schedule delay analysis.
- Evaluated claim for schedule delays and liquidated damages on behalf of vertical transportation subcontractor on reconstruction of a transit station. The project consisted of construction of a new box tunnel below the existing transit line and major renovation and reconstruction of existing transit station. Analyzed schedule updates and recovery/acceleration schedules to determine impact on multiple completion milestones. Evaluated delay issues and disruptions associated with installation and testing. Assisted in preparation of expert report.
- Provided analysis of contract changes and disputes for a $1.6M claim on the construction of a new LEED fire station in Charlottesville. The fire station included multiple garage bays, a dormitory, and administrative offices. Contractor claimed cumulative impact claim allegedly resulting from multiple changes, errors, omissions and deficiencies. Evaluated contractors cumulative impact claim and critiqued total cost method of damages.
- Performed a CPM schedule delay analysis on the construction of a $30 million school building to evaluate proportion of subcontractor responsibility for contractor delays. Issues evaluated included testing and balancing of HVAC, plumbing, electrical, and security systems, building commissioning, post-substantial completion delays. Damages included additional general conditions, home office overhead, and assessment of liquidated damages. Assisted in preparation of expert report.
- Provided schedule delay analysis in defense of a wrongful partial termination claim regarding the construction of a new 226,000 square foot refrigerated warehouse and office facility. Evaluated delays associated with storm water system redesigns, concrete slab installation, concrete electrical pad redesign and installation, and connection of permanent electrical power, as related to the partial

termination. Developed exhibited expert affirmative and rebuttal reports. Assisted client by attending deposition of opposing counsel's schedule delay expert and arbitration.

- Retained by owner's counsel to investigate contractor delays in completing addition and renovation work for a skilled nursing facility and memory care facility and respond to contractor's expert report. Performed a detailed forensic CPM schedule analysis to identify and quantify delays to project completion, and apportion responsibility for delays. Prepared a fully exhibited expert rebuttal report in support of arbitration. Assisted counsel at arbitration.
- Retained by surety's counsel to respond to allegations regarding delay and disruption in the performance of HVAC in the construction of a new correctional facility for the Department of Corrections in Pennsylvania. The project included construction of several housing units, a female transition unit, vehicle access facilities, and activities buildings. Performed an analysis of contractor's incurred costs to determine appropriate damages related to delay and disruption. Prepared a fully exhibited expert report.